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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,074	06/17/2005	Allan Marshall	0-010197USWZEN	4254
7590 OMNOVA Solutions Inc. Chief Intellectual Property Counsel/Law Dept. 175 Ghent Road Fairlawn, OH 44333-3300			EXAMINER CHAPMAN, JEANETTE E	
			ART UNIT 3633	PAPER NUMBER
			MAIL DATE 05/16/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/510,074

Applicant(s)

MARSHALL ET AL.

Examiner

Jeanette E. Chapman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 3/14/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 13-20, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Beck (5087508).

Beck discloses flexible sheet wall 16 lining comprising one or more phase change materials that each exhibit a phase change at a temperature in the range of 5°C to 40°C. See column 3, lines 5-10, column 4, lines 45-65, column 5, lines 15-25.

13.

Beck teaches that the or each phase change is endothermic with increasing temperature and exothermic with reducing temperature. See column 5, lines 1-14

14.

Beck teaches that the or each phase change material 16 is in the form of particles. See figure 1 and column 5, lines 62-65.

15.

Beck, example 1& comparative example A discloses that the particles have a size in the range of 10-100microns, definitely within the recited range 10 microns to 120microns

16, 17.

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Beck references patents to Kreibic et al and Anderson et al as employing those crystalline resins to be used by Beck wherein is taught each particle is encapsulated with an impermeable coating which is flexible. Also see example 1

18.

Beck further teaches the particles are embedded in a layer of the wall lining. See figure 1

19.

Beck teaches the particles are adhered to an absorbent layer of the wall lining. See figure 1

20.

Beck clearly shows the wall lining comprises from 30% to 60% by volume of the phase change material(s). The volume changes with external changes but example 1 clearly shows the percent volume of phase change materials.

22.

Beck, column 5 lines 15-35 teaches that the wall lining comprises at least two phase change materials, the temperatures at which the at least two phase change materials exhibit the phase change differing by at least 1 °C.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 11,12 and 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payne et al (5532039) in view of Beck. Payne discloses a thermal barrier for controlling heat transfer across and through buildings(hence building walls), appliances and textiles products. Column 8 further states Adhesives should be selected that permit microencapsulated phase change material to be appropriately suspended in the adhesive mixture and application ofmixture should preferably be performed in such a manner that substantially even distribution over the surface area of the substrate (*such as a wall surface*)". Therefore, payne et al teaches an adhesive layer for adhering the flexible sheet wall lining to a wall or substrate. Payne et al also teaches 21 the or at least one of the phase change materials is hydrated below the temperature at which the phase change material exhibits the phase change. See column 4, lines 15-55 and compare with the desired phase change temperature ranges of Beck. Some of the temperatures of hydrated materials is below the temperature of the phase change temperature range of -20 through 40 degrees Celsius of Beck

In view of the above, it would have been obvious to one of ordinary skill in the art to employ a combination phase change materials such as that suggested by Beck and Payne protected from deleterious effects due to exposure to sunlight, rain and abrasion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E. Jeanette whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00, every fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/
Primary Examiner, Art Unit 3633